



Rob_J_Hartman@astaris.com

09/28/01 03:09 PM

To: Linda Meyer/R10/USEPA/US@EPA
cc: Andrew Boyd/R10/USEPA/US@EPA, j_dave_buttelman@astaris.com
Subject: Re: Response to Public comment for allowing closure in place for pond 18

I009518
FF170
9/28/01

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Linda: The following would constitute our response:

Response: FMC developed a process ("the 8S recovery process") for recovering phosphorus from sediments stored in Pond 8S. Pond 8S was a historic waste pond that received waste sediments during the 1970s and 1980s. The 8S recovery process began operation in the fall of 1982 and was closed in 1993 due to the unit's inability to economically recover phosphorus from pond sediments. The unit was subsequently dismantled and removed in 1993. The 8S recovery process was not efficient or reliable enough to economically recover phosphorus from pond sediments that historically contained relatively high levels of phosphorus. The process would be even less economically viable in removing phosphorus from sediments containing less phosphorus, such as those contained in Pond 18. In addition, the treated material exiting the 8S recovery process still contained measurable amounts of phosphorus and did not "deactivate" the sediments.

The overall reliability of the unit was poor. During 1989, the system had an on-stream efficiency under 40-percent (e.g., for every 10 hours of operation, less than 4 hours involved processing pond sediment). In addition, the phosphorus recovery of the system was highly variable. The design maximum recovery efficiency was 85-percent; however, during 1990 the phosphorus recovery varied between 25 and 95-percent. Regardless of the recovery efficiency, the processed solids returned from the unit still contained phosphorus at concentrations around 1-percent.

Through implementation of furnace and dock process improvements during the 1990s, the amount of phosphorus lost in waste sediments routed to ponds decreased significantly. Astaris estimates that the average phosphorus concentration in sediments at Pond 18 is about 1-percent, which is comparable to the concentration in sediments processed by the 8S recovery process. Thus, even if the unit was intact, use of the 8S recovery process would not be expected to recover significant additional phosphorus from the Pond 18 sediments.

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j_dave_buttelman@astaris.com,
09/28/01 10:27 AM

comment for
pond 18

To: Rob_J_Hartman@astaris.com
cc:

Boyd.Andrew@epamail.epa.gov
Subject: Response to Public

allowing closure in place for

Rob - can you help with the response to this one? The context was why not excavate, the wastes must be cleaned up. The comment was that FMC was able to reclaim millions of pounds of phosphorus and everything that was associated with it at Pond 8s. (this guy apparently worked at the

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